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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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P.O. BOX 2903				
MINNEAPOLIS, MN 55402-0903				
EXAMINER				
YABUT, DANIEL D				
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10/11/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/591,627

Applicant(s)

SCHWENDEMANN, FRANZ

Examiner

DANIEL YABUT

Art Unit

3656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 14-18 and 20-31 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 14-18 and 20-31 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/27/2010 has been entered.

Claim Objections

Claim 14 is objected to because of the following informalities: In line 14, the recitation "non-recessed portions the bore" appears that it should be - - non-recessed portions of the bore - -. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 14-18 and 20-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frey et al. (US PG Publication 2004/0012280; Frey hereafter) in view of Antonucci et al. (US Patent 6,119,306; Antonucci hereafter).

Frey discloses a rotary drive (see at least Fig. 1) that adjust a moving part in a motor vehicle ([0003]/ L1-5) comprising a(n):

Re claim 14

- Rotor (6) positioned with bearings (see bearings near 6 and 14 in Fig. 1) in a housing (Fig. 1) the housing defining a bore
- Supporting member (A; see Figure Y below) that provides an axial force to support the rotor, the supporting member including a(n):
- Base having a longitudinal axis (near F; Fig. Y below)
- Plurality of individual crosspieces (§ [0029] ll. 8-10)

Frey does not expressly disclose the housing defining recesses that radially extend from a circumference of the bore, the circumference of the bore being defined by non-recessed portions of the bore, each crosspiece extending to a cutting edge only in a direction perpendicular to the longitudinal axis of the base, each crosspiece having a shape that corresponds to one of the recesses of the housing such that the crosspieces axially insert within the recesses without turning, each crosspiece extending a distance from the base so as to overlap the non-recessed portions of the bore.

Antonucci teaches a housing (50) defining recesses (spaces adjacent ribs 54) that radially extend from a circumference of the bore, the circumference of the bore being defined by non-recessed portions of the bore, a support member (10) with each crosspiece (28) extending to a cutting edge only in a direction perpendicular to the longitudinal axis of the base (see crosspieces 28 extending perpendicular to the longitudinal axis of element 10 in at least Fig. 3-4), each crosspiece having a shape that corresponds to one of the recesses of the housing such that the crosspieces axially insert within the recesses without turning (col. 5 ll. 41-51), each crosspiece extending a distance from the base so as to overlap the non-recessed portions of the bore (col. 5

ll. 45-51) for the purpose of minimizing the rotation of the support member within the housing for locking therein (col. 1 ll. 21-27; col. 2 ll. 26-28; col. 6 ll. 52-58).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the housing of Frey to define recesses that radially extend from a circumference of the bore, the circumference of the bore being defined by non-recessed portions of the bore, and the support member of Frey to incorporate each crosspiece extending to a cutting edge only in a direction perpendicular to the longitudinal axis of the base, each crosspiece having a shape that corresponds to one of the recesses of the housing such that the crosspieces axially insert within the recesses without turning, each crosspiece extending a distance from the base so as to overlap the non-recessed portions of the bore, as taught by Antonucci, for the purpose of minimizing the rotation of the support member within the housing for locking therein.

Frey as modified above further discloses the following:

Re claim 14 (cont'd)

- Cutting edge of the crosspieces cut into the non-recessed portions of the bore when the support member is turned relative to the housing without axial displacement of the support member (col. 5 ll. 45-51); Note: Regarding this limitation, the MPEP states, “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process”. As set forth in MPEP 2113, product by process claims are not limited to the manipulation of

the recited steps, only the structure implied by the steps. Once a product appearing to be substantially the same or similar is found, a 35 USC 102/103 rejection may be made and the burden is shifted to applicant to show an unobvious difference. See MPEP 2113.

Re claim 15

- Base of the supporting member is cylindrically shaped (20; Fig. 4 in Antonucci), the cylindrically shaped base defining an outer circumference (22; Antonucci)

Re claim 16

- Crosspieces being arranged in tangentially spaced intervals and extending over an angular range that consists of a fraction of the outer circumference (26; Antonucci)

Re claim 17

- Crosspieces including two crosspieces lying radially opposed to each other and being curved, and are positioned around the outer circumference (28; Fig. 8 in Antonucci)

Re claim 18

- Crosspieces are arranged in several planes, which are axially spaced in intervals (Fig. 8; Antonucci)

Re claim 20

- Non-recessed portions of the housing define an attachment area being manufactured from a softer material than that of the crosspieces (col. 8 ll. 24-28; Antonucci).

Re claim 21

- Each of the cutting edges of the crosspieces having is a first cutting edge (ends of crosspieces 28, see in at least Fig. 8; Antonucci), wherein the crosspieces having a second edge with locking mechanisms (col. 6 ll. 24-27)

Re claim 22

- Rotor has a front face with a radius (D; see Fig. Y below) that rests against a flat stop surface (E; see Fig. Y below) that is formed on the supporting member

Re claim 23

- Supporting member has a first end and a second end, the first end including a stop face that contacts the rotor (at E; Fig. Y below), the second having a form closed entrainment member (F; see Figure Y below; see ¶ [0029] lines 8-14)

Re claim 24

- The softer material including plastic, aluminum, magnesium or zinc (col. 8 ll. 24-28)

Re claim 25

- Locking mechanisms include a ridge that grabs tightly into the housing when turning occurs against the direction of installation (col. 5 ll. 45-51; col. 6 ll. 24-27)

Regarding claim 26, Frey does not expressly disclose the entrainment member being an inside polyhedron or cross slit that transfers a torque during the installation of the supporting member into the housing.

It would have been an obvious matter of design choice to one having ordinary skill in the art at the time of the invention to provide the entrainment member having an inside polyhedron or cross slit, both of which are old and well known in the art to enable a transfer of a torque to

the supporting member during the installation of the supporting member into the housing for the purpose of facilitating installation (or removal) of the supporting member. Furthermore, the use of a polyhedron and a cross slit for the purpose of transferring torque during installation was well known in the art by one of ordinary skill at the time of the invention.

Frey as modified above further discloses the following:

Re claim 27

- Housing having a through hole and radial recesses that extend from a circumference of the through hole, the circumference being defined by non-recessed portions of the through hole (next to ribs 54; Antonucci)
- Rotor (6) positioned with bearings (see bearings near 6 and 14 in Fig. 1) in the housing (Fig. 1)
- Supporting member (34), which is attached via a form closure (at F; Fig. Y below) on the housing
- Supporting member (A; see Figure Y below) that provides an axial force to support the rotor having radial crosspieces (see ¶ [0029], lines 8-10) having a shape that is complementary to a shape of the recesses such that the crosspieces axially insert within the recesses during installation without turning (col. 5 ll. 39-51; Antonucci).
- Radial crosspieces each having a cutting edge (near 28; Fig. 8) extending only along a plane perpendicular to a longitudinal axis of the supporting member (Fig. 8; Antonucci), wherein the cutting edge is configured to cut into the non-recessed portion of the housing when the support member is turned relative to the housing without displacement along the longitudinal axis of the supporting member (col. 5 ll.

54-51; col. 6 ll. 24-27; Antonucci); Note: Regarding this limitation, please refer the above note regarding MPEP 2113.

Re claim 28

- Supporting member includes a base (at F; Fig. Y below), and wherein the crosspieces are spaced apart from one another about an outer diameter of the base (28; Fig. 8; Antonucci)

Re claim 29

- Crosspieces include two curved crosspieces that oppose one another (28; Fig. 8; Antonucci)

Re claim 30

- Crosspieces are located in different spaced-apart planes (28; Fig. 8; Antonucci)

Re claim 31

- Supporting member is turned relative to the housing in a first direction when the cutting edges of the crosspieces cut into the non-recessed portions (see note regarding MPEP 2113 above), the crosspieces each having a locking mechanism that prevents rotation of the supporting member in a direction opposite the first direction (col. 6 ll. 46-51)

Response to Arguments

Applicant's arguments with respect to claims 14-18 and 20-31 have been considered but are moot in view of the new ground(s) of rejection.

Appendix

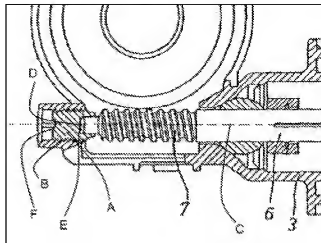


Figure Y: View of supporting member within rotor drive in the device of Frey et a

(Continued on next page)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL YABUT whose telephone number is (571)270-5526. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:00 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard W. Ridley can be reached on (571)272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANIEL YABUT/
Examiner, Art Unit 3656
10/4/2011

/Justin Krause/

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Primary Examiner, Art Unit 3656